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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,123	03/30/2001	Akira Ishibashi	09792909-4822	8878
26263	7590	06/24/2004	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080			PETKOVSEK, DANIEL J	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,123

Applicant(s)

ISHIBASHI ET AL.

Examiner

Daniel J Petkovsek

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on supplemental amendment received 5/13/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) 39 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 41-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to the amendment filed April 26, 2004, the interview conducted May 5, 2004, and the supplemental amendment filed May 13, 2004. In accordance with the amendment received April 26, 2004, claims 1-4, 6, 8, 9, 18, 19, 30, 35, 41, 42, 48-50, and 57 have been amended, while claims 39-40 have been canceled. In accordance with the supplemental amendment received May 13, 2004, new claims 58-62 have been added.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-38, 41-57, 61, and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 9-38 and 41, the statement "...apparatus configured to receive sensory information other than visual information and audio information, *in addition to* the visual information and/or the audio information", is a contradictory statement, since Applicant first claims the apparatus receiving information other than visual or audio, then states that the apparatus receives visual and/or audio information. Regarding claim 14-16 and 56, "said image" and "the image" lacks antecedent basis.

Regarding claims 1-18, 39, and 41, there is no structure in the claim that would preclude the desired result(s), such as a result of an information display plane that receives and displays at least one of the proximately discernable senses. The structure which goes to make up the device must be clearly and positively specified. It is not clear from the specification as to which senses

Art Unit: 2874

are proximate and which are remote, since it could be reasonably inferred by a person having ordinary skill in the art that some senses *are both remote and proximate*. The structure must be organized and correlated in such a manner as to present a *complete operative device*. Regarding claims 19-38, and 41, there is no structure that would preclude the desired result(s), in particular the results of a “projection being formed or a temperature change being produced”, or “liquid being emanated from a surface of said fiber”.

Regarding claims 42-57, these claims have no structure that would preclude the desired result as claimed in independent claims 42 and 50. Regarding claim 52, proximate sense is already stated as olfactory. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a *complete operative device*. For example, “a projection is formed”, and “a vapor is emitted” are desired results that have no claimed structure. Regarding claims 61 and 62, the claim limitations “releasing a vapor” or “forms a projection” by any other sense than olfactory and tactile/visual, respectively, is not reasonably disclosed by the specification to use this apparatus with other senses.

Claims 58-60 are **not** viewed as having 35 U.S.C. 112, second paragraph problems.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2874

3. Claims 1, 2, 4-6, 9, 10, 13, 14, 16, 50, 51, 53, 54, 58, 60, and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee U.S.P. No. 5,398,070.

Lee U.S.P. No. 5,398,070 teaches (ABS, summary) a television (audio/video) system that also emits smell/olfactory information. Regarding claims 4 and 10, the smells are given at different positions of the display. Regarding claims 5, 12, 16, and 53, sound is present and the odors inherently have temperature and/or humidity levels.

4. Claims 1-5, 9-12, 14-16, 42-45, 58, 59, and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Hogan U.S.P. No. 5,793,918.

Hogan U.S.P. No. 5,793,918 teaches (ABS, Figs. 3, 9, column 6 lines 50-64, claim 1) a movable 3-D display using optical fibers that project and change tactile positions (in addition to having visual/audio information), by using optic fiber adjustment assembly 119 that moves the distal ends of the optic fibers 121 away and outward, the fiber position representing tangible tactile information. Regarding claims 4 and 10, the information is at different positions of the display. Regarding claims 5, 12, 15, 16, and 45, sound is present and the fibers (forming images) inherently have temperature and/or humidity levels.

Allowable Subject Matter

5. Claims 30-38 are rejected under 35 U.S.C. 112, second paragraph, but it is indicated that these claims have allowable subject material, if the 35 U.S.C. 112, second paragraph rejection are corrected.

Art Unit: 2874

Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, with respect to the state of the art of virtual reality devices: PTO-892 form references B and N-P.

8. **THIS ACTION IS MADE NON-FINAL**, since new art has been used to target the same issue of the display.

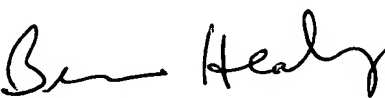
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J Petkovsek whose telephone number is (571) 272-2355. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel J Petkovsek
Examiner
Art Unit 2874

June 18, 2004


Brian Healy
Primary Examiner